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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,830	01/19/2007	Riaan Lingenfelder Van Wyk	DET-0007	8941
23413	7590	02/04/2008	EXAMINER	
CANTOR COLBURN, LLP			CLARK, CHRISTOPHER JAY	
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			ART UNIT	PAPER NUMBER
			2836	
			MAIL DATE	DELIVERY MODE
			02/04/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,830	Applicant(s) VAN WYK ET AL.	
	Examiner CHRISTOPHER J. CLARK	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/9/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on May 9, 2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Bossarte et al.
5. In re Claim 1, Bossarte teaches a blast key (20) which includes a body (20, and as seen in Figure 2) and a blast energy generator (55) in or on the body as seen in Figure 4.
6. In re Claim 2, Bossarte teaches a switch (52, Column 7 Lines 35-42) which controls operation of the blast energy generator.
7. In re Claim 3, Bossarte teaches that the switch is selected from a manual switch, an electronic switch and an electromechanical switch (Swx of Figure 7 is shown to be a switch which is controlled by a microprocessor, therefore implying that the switch is either electronic or electromechanical if it is capable of being activated via electrical signals from a microprocessor.

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8. In re Claim 4, Bossarte teaches a control logic unit for controlling operation of the switch (53, Column 7 Lines 43-47).

9. In re Claim 5, Bossarte teaches that the control logic unit is responsive to at least one external control device (11, Column 5 Lines 28-38 and Column 7 Lines 27-47).

10. In re Claim 6, Bossarte teaches that the external control device is selected from manually operable input devices (15, as seen in Figure 2) and communication links (17, as seen in Figure 2) which are connected to the control logic unit.

11. In re Claim 7, Bossarte teaches that the manually operable input devices are mounted to the body via connector 17 as seen in Figure 2.

12. In re Claim 8, Bossarte teaches that the body is a housing as seen in Figure 2 and the blast energy generator is mounted in the housing as seen in Figure 4.

13. In re Claim 9, Bossarte teaches a plurality of terminals (29, as seen in Figure 2) mounted to the body (Column 5 Lines 64-67 teaches packaging devices 20 and 22 together) to enable the blast energy generator to be connected to a blast control unit (43 as seen in Figure 3, Column 6 Lines 48-57).

14. In re Claim 10, Bossarte teaches an energy source (27) for actuating the blast energy generator in a controlled manner.

15. In re Claim 11, Bossarte teaches a blasting arrangement which includes a plurality of detonators (4), a blast control unit (43), and a blast key (20) which is removably connected, directly or indirectly, to the detonators and the blast control unit (Column 6 Lines 30-34 teach that the detonators and their blast control unit become disconnected from the distribution panel, which is taught to be packaged with the blast key/interface, upon their launch) and wherein the

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blast key includes a blast energy generator (55) which provides electrical energy at a predetermined voltage for arming the detonators.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bossarte et al.

18. In re Claim 12, Bossarte discloses the claimed invention except for the energy source (55) being included in the blast key (11). It would have been obvious to one having ordinary skill in the art at the time the invention was made to place the energy source in the blast key in order to minimize space and provide a more portable and power independent device since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER J. CLARK whose telephone number is (571)270-1427. The examiner can normally be reached on M-F, 7:30-5:00 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CJC
1/30/2008



MICHAEL SHERRY
SUPERVISORY PATENT EXAMINER